CONTRACT FOR CHANGE

Challenges Ahead

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You are a program manager (PM) and you've moved to a new job in a new town. The family will join you after the children have finished the school year. Your new job is the same as the one you left — managing a program. You will be in the new town until you bring a new computerized tracking system from its prototype stage into production and to full fruition. Then, you either will move back to the town from which you came or, perhaps, to another program with a government contractor in another town.

What has this to do with defense acquisition and government service? In answering, let's relate the following to your role as this new PM.

Problems Encountered

Choices you will have to consider are housing and new furnishings, schools for your children, acquiring a new car, and how best to spend your money to obtain everything you will need for the move. Every dollar you spend will be an investment in your job, yourself and your family's future. You'll want to evaluate wisely.

Some decisions you must make are shown below:

— *Housing.* Should you buy a house or rent an apartment in the new town? Should you keep the house in the old location and rent it out? Will you want new furniture for a new house? With limited transfer money available and what you have in the bank, can you afford the things you need and want?

— *Transportation.* Should you buy or lease a new car? The old one has high mileage and is more than six years old. It worked well enough to go to and from the train station, taking the children to and from school, and for shopping, but these are all short distances. In the new location, there are no trains and distances to be traveled are greater.

These choices can be put in a more structured form by asking yourself a few basic questions related to economy:

— What is the real or utility value of the things you need or want? What value will they provide to you and your family?

— What is the cost of each item in terms of their total cost? Is each item expensive, not just in dollar value

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The author invites readers' thoughts and comments.

invested but in terms of space allocation and general upkeep? This question involves both your time and money.

— What is the likelihood of any of these purchases becoming outmoded, thus, requiring storage and cost of upkeep without a benefit derived from their possession? For example, you may need to store the furniture and yard equipment from your old home if you decide to move into a smaller house or apartment.

Where We Are

This country has gone through an extended period of knowing what we needed to buy, because we knew who our enemies were and their adversarial capabilities. We knew where the things we bought would be used, how long they would be needed, for what purpose, in what operating environment, and what personnel skills would be required to use and maintain them. Our situation was clear and accepted easily by almost everyone. The cost was not as important as the sense of security our systems could provide.

A great deal of our nation's money is invested in items and in the highly trained and skilled people required to use them. But, what value do they have now and in the future?

So, we spent our money and stocked up on systems, personnel and their training, supplies, buildings and facilities, support equipment, and all the other vendors and things required to use and maintain everything we purchased. Suddenly, because of a political change of mind somewhere far away, we were forced to move to "a new job in a new town where things would be different."

Using Reason

A great deal of our nation's money is invested in items and in the highly trained and skilled people required to use them. But, what value do they have now and in the future?

Let's return to the new job in the new town. Consideration must be given to all the challenges this brings. Better transportation must be found — a new car or a later model with low mileage. Housing chosen may not be as convenient as in the old location where the stores and schools were within walking distance. The new town may be somewhat isolated, resulting in a longer drive to the new job and driving to a distant, larger town for shopping.

Longer trips mean more frequent servicing of the car; added mileage means trading in sooner than ever before. Also, since a move may occur again within 2-3 years, equal consideration should be given to leasing as to buying.

Is buying a new home the right decision or, since another move may come up in a few years, is renting a townhouse or apartment best? Should the home in the former location be sold and proceeds banked, or rented out since returning to it upon job completion is a possibility?

Factors To Consider

When making these decisions, the following should be considered:

— What is the real or utility value?

— What are the total investment costs?

Official USAF photos

The AAR Corporation recently was awarded a limited-term subcontract to provide total line maintenance and scheduled heavy maintenance on the AWACS E3 radar and communications training aircraft.

— What is the period before newly acquired items become obsolete and no longer used?

You've decided to buy a new car because you will keep it for a long time. Although you know you will put many miles on it, you have decided that if you take a car-care course at the local vocational-technical school and invest in a few specialized tools, you can keep it well maintained. The car will serve you for more than 100 thousand miles. So, purchasing a new car, in this situation at least, is the better choice for you than leasing because it will have:

— A high utility value, because you must have a car to drive. A leased car would provide this as well.

— A high investment cost. The cost of a leased car would remain constant and, accumulated over time, would be high. Payments on a purchased car would end, but its service would go on beyond the last payment, thereby reducing its real investment.

— By valuing the new car for its transportation or utility value rather than for its newness or market value, its period before obsolescence will be extended. A leased car would not become obsolete. A new car has:

1. High utility value

2. Low investment cost, considering all factors related to its cost and projected operating expenses over the period it will be kept

3. A long period before its obsolescence because it will be kept a long time, and it's not likely a better mode of transportation will be available.

A new car, then, is a good acquisition because of the cost.

A new house would have:

1. High utility value, but so would an apartment

FIGURE 1. Evaluating the Decision

Utility Value
Low ..... High
Investment Cost
High ..... Low
Period Before Obsolescence
Short ..... Long

2. High investment cost (The apartment has no investment cost, only a monthly charge for living space rental.)

3. A relatively short period before its obsolescence. You may have to move.

Based on the above reasons, buying a new house is ruled out in favor of leasing an apartment.

Extending Personal Financial Logic To the Job

Consider the PM's computerized tracking system and applying this same method of new acquisition assessment to it.

Utility Value. How useful is the total system including its equipment, facilities and people? Does it have many other applications, or is its value limited to narrow parameters requiring specific threats or operational applications and environments? What about the equipment needed to field it? Can any of it be used or modified to support other systems, thereby increasing their own utility value? What about the utility value of the people required for operation and maintenance. Aren't they and their training a part of this system's acquisition?

Investment Cost. Is the system expensive, in real terms, considering its total cost including its people and their training? If a new building must be built to house the new system and its people, isn't the cost of that building part of the system's cost, too? What about the investment in repair parts, their handling and repair and storage equipment to stock them, and all the other related expenses involved in the system's acquisition, including new transportation vehicles and security requirements?

Period Before Obsolescence. What if it is likely that a smaller, simpler and more portable system will come along — a system at lower cost to buy and operate. After all, we are talking about a relatively new and changing technology.

Use the chart in Figure 1 to evaluate the decision.

Using the chart in Figure 1 and the PM's new computerized tracking system as an example, we can see this new acquisition has a:

— High utility value (far right on chart)

— High investment cost (far left on chart)

— Long period before its obsolescence (far right on chart).

The best two-out-of-three choice is to buy the new system.

What the new system had was a:

— High utility value (far right on chart)

— High investment cost (far left on chart)

— Short period before its obsolescence because of an impending change in system technology that could cause it to become obsolete very soon (far left on chart)?

The new choice is to lease the new system rather than buy it, because leasing limits government investment in this system and allows for change so a better system can be adopted more easily when it comes along. Of

course, a new system could be contracted or leased for its period of service, too.

The Other Choice

When our country needed to be able to react to the threat of a total nuclear war, we relied heavily on our absolute possession of our means to field and support our nation's defenses. Everything needed to do that job had to be owned and controlled in order to be depended upon at a moment's notice, moved quickly over possibly great distances, and used for the purpose for which they were intended.

That is no longer the case. Today, in our "new world order," we are left with a huge investment in things that may very well have become obsolete due to change. If these tools-of-war can be adapted to new uses, their utility value will increase, their overall investment cost will be reduced, and their period before obsolescence will be extended. In other words, they will be kept because they are needed and the cost to keep and maintain them is not prohibitive considering their benefits.

In the commercial world, two ways to acquire the use of things needed have been to buy and own them, or rent them for the time period during which they will be needed and used. Both acquisition methods have always been equal in the personal and business finance worlds.

In defense acquisition, we have the same latitude of choices as the business and personal worlds have always enjoyed, and we can save our country a lot of money besides. If you were the PM mentioned earlier in this article, would you limit yourself to buying and owning only the things you need? Or, would you go through a process of cost evaluation and risk assessment in order to get the things you need at the lowest possible cost to you? Is it necessary to buy a system, its supporting data, paperwork, hardware lines of logistical support, trained personnel, and all else related that is required to field it just to have the system available for use? Wouldn't it be more prudent from its acquisition to be able to buy some things and contract for the service or use of others, even the complete system itself? Is the point of acquisition derived benefit or property ownership?

In defense acquisition, we have the same latitude of choices as the business and personal worlds have always enjoyed, and we can save our country a lot of money besides.

Contracted support can:

— Limit government risk in the long and short term by limiting its real investment in people and things

— Reduce overhead and operating expenses by paying for only that portion of goods and services actually used

— Reduce the need for storage, overall system management, and parts inventory controls because we do not have the support responsibility of ownership

— Substantially reduce changeover costs in order to adopt new, rapidly changing hardware and technologies

— Increase accountability and our means of total overall cost assessment for decision making by limiting costs to a single service source and relating costs to real-use time

The Ground Launched Cruise Missile System is maintained by contracted support.

— Decrease the need for sole-source hardware vendor support, thereby reducing regional political involvement (Vendors who provide service and commercial support will be more numerous and competitive than those who provide only a stock of sole-source hardware and information.)

— Decrease the cost and need for buildings, maintenance personnel, and depth of operator training.

Most important, contracted support can adapt more readily to change.

Contracted support is no longer the last alternative in a selected program's acquisition. It is now, as it has always been, simply the other way of doing business.

Contracted support, or renting rather than owning the things we need, has been used successfully for the air refueling aircraft KC-10; Special Air Mission (SAM) C-137; Ground Launched Cruise Missile program; more recently, the E3 AWACS; and many other systems. These systems always have been consistently reliable and fully capable of fulfilling all of their mission needs. Yet, is contracted support considered equal to what is termed in our acquisition world as "organic" ownership?

The Deciding Variable: Cost vs. Time

When a system or piece of equipment was needed to counter the threat of total war, a war that could threaten not only the system but also its lines of maintenance and material support, it was necessary for the entire system to be bought and maintained for a long period of time. We and our enemies were caught up in a real war of massive indebtedness and spending to do this, we had to buy everything needed to meet or exceed what the other side had bought, and we had to be able to field each system as a complete and fully supportable "unit" of combat that could stand by itself in the exploding furnace of earth's "last great war."

Why should we continue to invest our nation's resources in the same old system of purchasing "total capability," with its resulting duplication of hardware and effort?

Enemies today may very well be friends tomorrow, and our defense needs are in a constant state of change. Why should we continue to invest our nation's resources in the same old system of purchasing "total capability," with its resulting duplication of hardware and effort? Like the PM and his house and car, the choices we have are the cost of our investments vs. the length of benefit or utility value we can expect to derive from their use and service. The threat of total war is not as great as it once was. Contracted support can help us to take advantage of that change by helping us to buy only the service we need rather than all the things needed to produce that service.

Sharing the Load

Contracted support is service without the encumbrance and cost involved in ownership. And, it lets business and industry share with us equally in the risks, investments and created employment derived from our nation's defenses. As long as we continue on our path of business-as-usual, using the same old system of organic ownership preferred over contracted service, we run the risk of tying up our nation's resources in things we may not need. After 50 years of waging the Cold War, our regulations, our organizational structures, our training, and our methods of acquisition and decision making are clearly in favor of doing business in the same old way. Isn't it time to consider change?

Taking Advantage Of Change

Of course, all the things we need cannot be contracted. Defense is not a for-profit business constantly driven by profit and the bottom line. As professionals, though, we can conserve our nation's wealth by taking advantage of change and altering how we do business when new opportunities are presented. "Contracted support" and organic ownership are equal in our daily lives and in business. Shouldn't they be equal in every decision phase of defense acquisition, as well?

Department of Defense Instruction (DoDI) 5000.2, "Defense Acquisition Management Policies and Procedures," states: "Total System Acquisition. Acquisition programs shall be managed with the goal to optimize total system performance and reduce the cost of OWNERSHIP [author's emphasis added]." (As stated, ownership is the driving purpose of defense acquisition.)

Contracted service is not an equal force in acquisition. In fact, it is seldom mentioned in acquisition texts. When dealing with the forces of change, it is the best way of doing business because it reduces both risks and our investment in things.

Change can work for us. Because of it, new opportunities are being offered and new, specialized skills and jobs created as well.

This theory is advanced in DoD Directive 5000.1, under "Contract Type Selection. The contracting approach selected for each acquisition phase must permit an equitable and sensible allocation of RISK between Government and Industry." (How best is this done than by sharing the cost in both people and things with business?)

The DoDI 5000.2, further states: "Acquisition Strategies. The following statutorily imposed requirements apply during Phase 0: Competitive Alternative Development and Production. Acquisition strategies must be prepared by the Secretary of Defense (as delegated) and must allow the option for COMPETITIVE ALTERNATIVE SOURCES [author's emphasis added] for the system and EACH [author's emphasis added] major subsystem under the program throughout the period from the beginning of full scale (engineering and manufacturing) development through the end of procurement. (10 U.S.C. 2439 (reference (f))" (Hardware purchase rather than service sources are implied in this and other statements and texts.)

Contracting for Service

Having what is needed when it is needed to ensure a system's use and survivability has always been the goal of logistics and mission support. The factor that has overshadowed all acquisition decisions for the past 50 years has been how to do this and still maintain a system's long-range mobility during the threat of an all-out nuclear war. The answer to this problem has been to buy and own everything, and in large redundant quantities.

To have a system fully capable in a time of need no longer requires owning it and its means of support, too. The system must only be fully capable of achieving its purpose at the time it is needed. Contracted service puts more risk in the hands of business, and it creates new jobs for us and the public as well. It lets them share in the costs and the responsibilities of providing and maintaining our nation's defenses. To turn change to our advantage requires the time and effort to study it, and seeing our world of defense acquisition in newer, bolder ways.

Special Air Mission (SAM) C-137.

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